

## 中華民國專利公報 [19] [12]

[11]公告編號：503301

[44]中華民國 91年 (2002) 09月21日

發明

全 6 頁

[51] Int.Cl<sup>07</sup> : F04D29/60

F04D19/00

[54]名稱：組合式散熱風扇之製造方法及其結構

[21]申請案號：090123084

[22]申請日期：中華民國 90年 (2001) 09月19日

[72]發明人：

楊聖安

高雄縣大樹鄉竹寮路三七三號

[71]申請人：

楊聖安

高雄縣大樹鄉竹寮路三七三號

[74]代理人：林鑑珠 先生

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## [57]申請專利範圍：

1.一種組合式散熱風扇之製造方法，其係分別成型出一下風扇體及一上風扇體，下風扇體之本體頂面突出呈錐狀，其外周突伸數下葉片，下葉片之頂緣外周呈一體續接有下固定環，上風扇體具有可固設於本體之錐狀中央的套環，套環周邊延伸有對應下葉片之上葉片，上葉片之底緣外周呈一體續接有上固定環，上、下固定環分別設置有與上、下葉片對應數量之澆口，其係利用澆口將塑料均勻灌入，使上、下風扇成型，再將上、下風扇體組裝黏結成一體，且上、下固定環亦呈黏置狀態，再除去上、下固定環，即為一組合式散熱風扇成品。

2.一種組合式散熱風扇之結構，其包含有一下風扇體及一上風扇體；下風扇體具有一本體，本體頂面突出呈錐狀，錐狀中央突設套軸，本

體外周突伸多數下葉片，本體頂面由套軸周邊向外延伸有與下葉片對應數量之卡掣槽，卡掣槽外端口與下葉片對齊：

5. 上風扇體具有一套環，套環中央穿設有對應套軸之套孔，套環周邊延伸有與下葉片對應數量之上葉片，上葉片根部具有與卡掣槽對應之卡掣條。
10. 3.如申請專利範圍第2項所述組合式散熱風扇之結構，其中卡掣槽中設有貫穿之定位孔，卡掣條底面對應定位孔突伸有定位柱。

## 圖式簡單說明：

15. 第一圖：係本發明之結構分解示意圖。

第二圖：係本發明之結構外觀示意圖。

第三圖：係本發明之結構剖面示意圖。

20. 意圖。

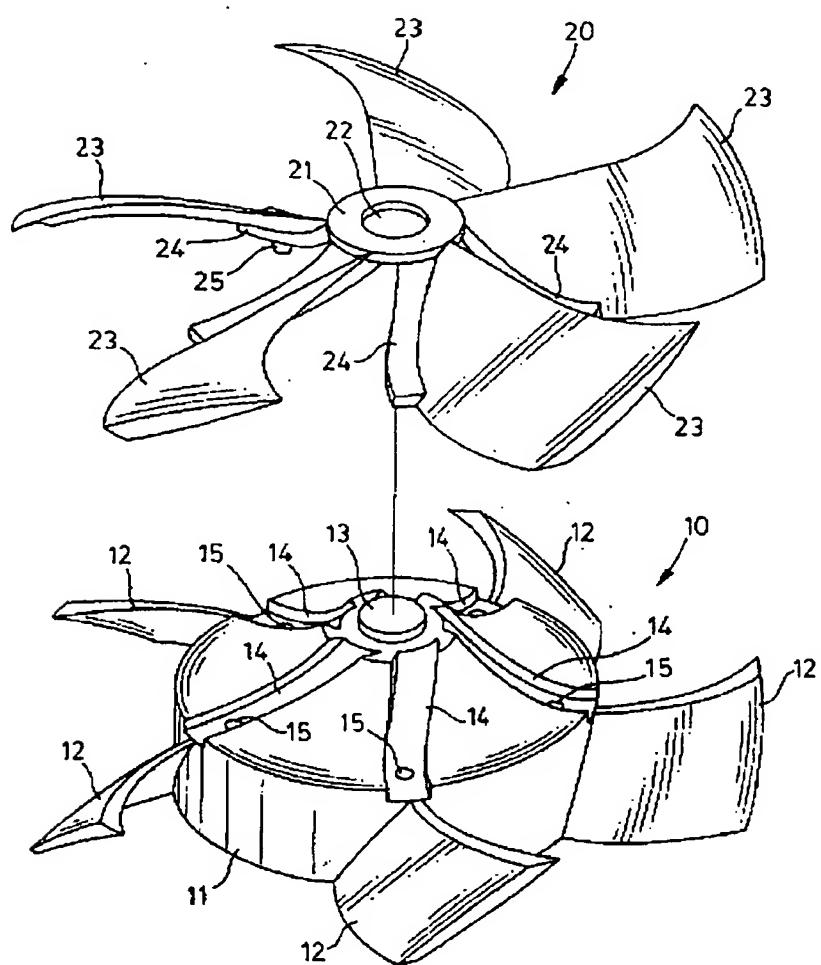
(2)

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第四圖：係本創作之使用狀態示意圖。  
第五圖：係本發明之製造方法流程示意圖(二)。

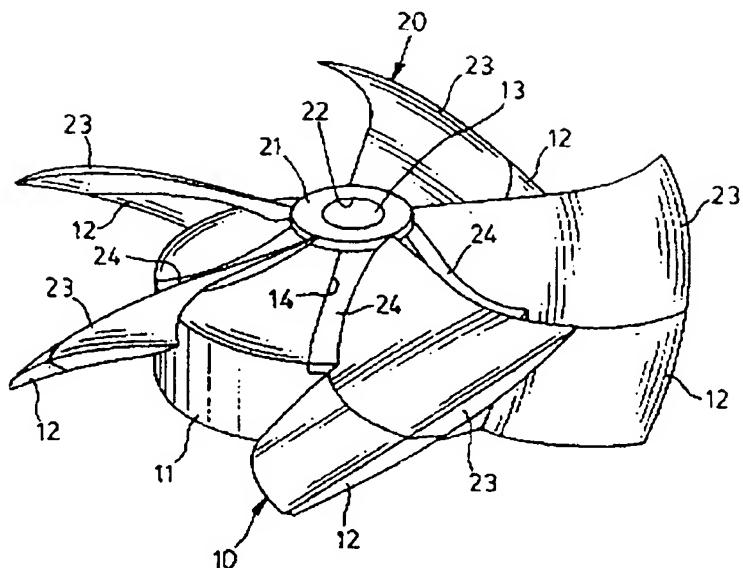
第六圖：係本發明之製造方法流程示意圖(一)。



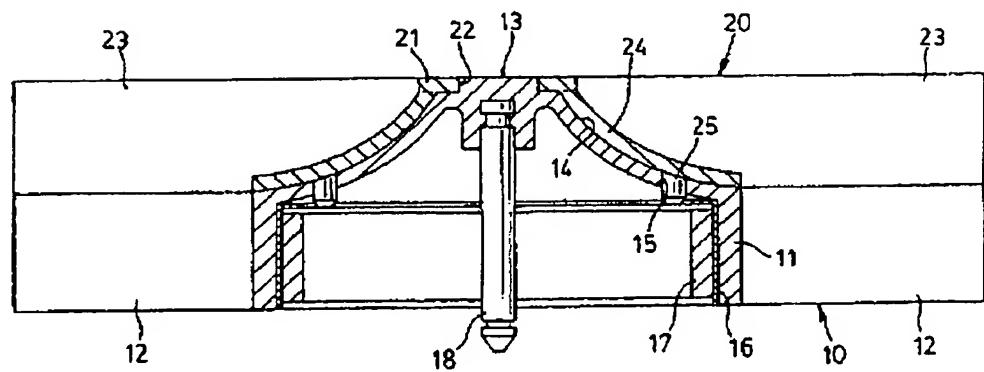
第一圖

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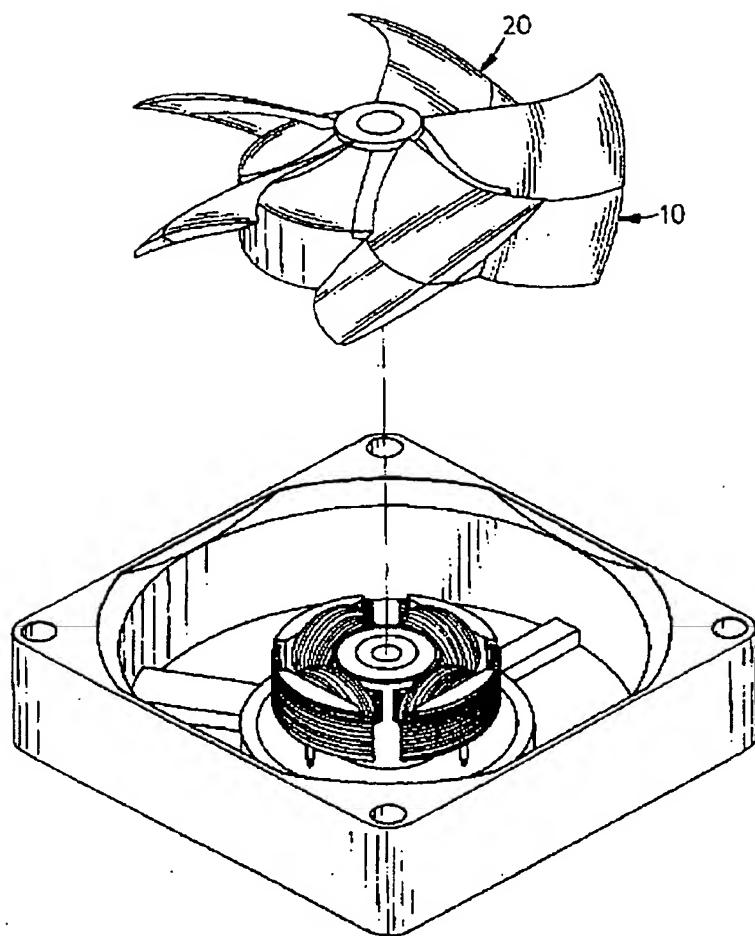


第二圖



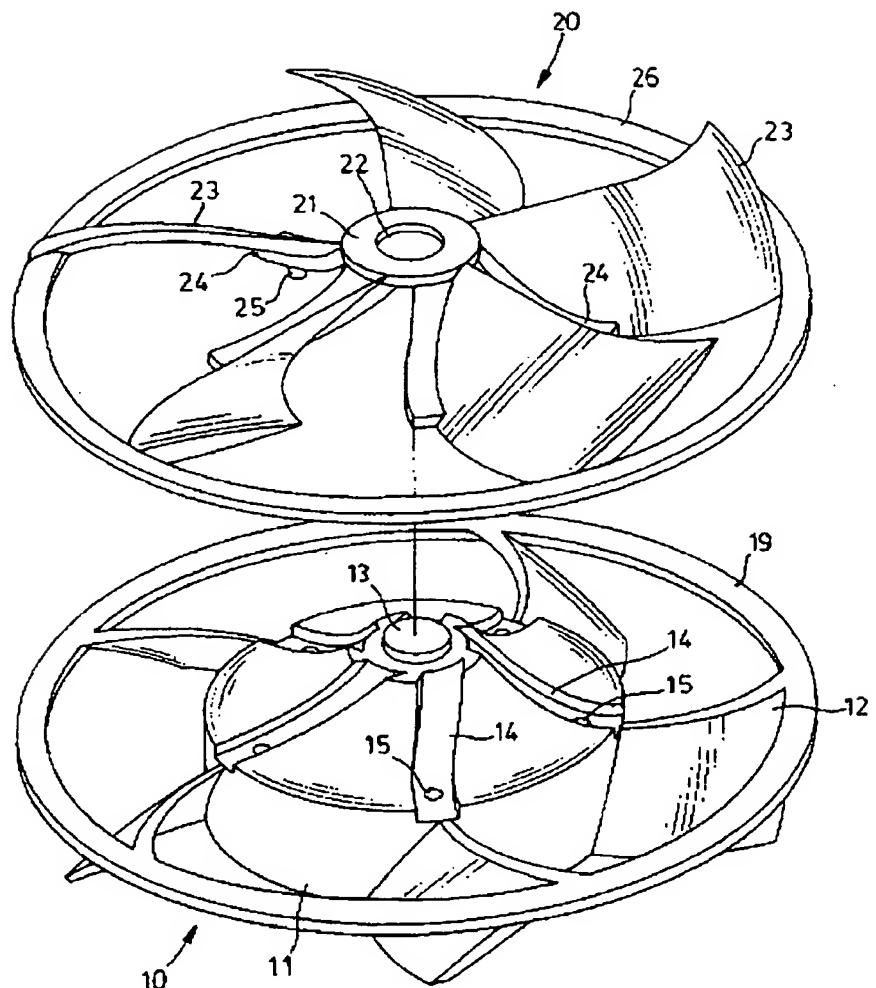
第三圖

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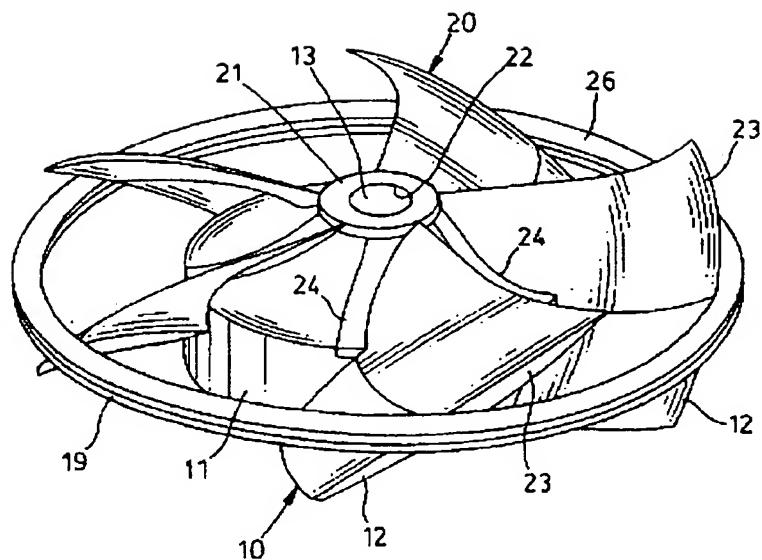
第四圖

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第五圖

(6)



第六圖

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**Method for manufacturing combination type heat dissipation fan and the structure thereof**

**Patent number:** TW503301  
**Publication date:** 2002-09-21  
**Inventor:** YANG SHENG-AN (TW)  
**Applicant:** YANG SHENG-AN (TW)  
**Classification:**  
- **International:** F04D29/60; F04D19/00  
- **European:**  
**Application number:** TW20010123084 20010919  
**Priority number(s):** TW20010123084 20010919

**Abstract of TW503301**

The present invention relates to a method for manufacturing a combination type heat dissipation fan and the structure thereof, comprising upper and lower fan members. The main body top surface of the lower fan member appears to be projecting conical shape and provided with several lower blades extending from external circumference thereof, and a lower fixing ring is integrally formed at the external circumferential top edges of the lower blades. The upper fan member has an engaging ring fixedly provided at the conical center of the main body. Upper blades corresponding to the lower blades extend from the circumference of the engaging ring, and an upper fixing ring is integrally formed at external circumferential bottom edges of the upper blades. The circumference of the upper/lower fixing rings are evenly provided with sprues with the same amount as the upper/lower blades, to evenly cast in the plastics through the sprue and make the upper/lower fan members be completely filled, so as to prevent the problem of unbalanced rotation due to uneven thickness. Further, the upper and lower fan members are combined together and the upper and lower fixing rings are removed, to form a combination type heat dissipation fan. Since the top surface of the main body appears to be projecting conical shape, the top edges of blades can extend to the center of the main body. Therefore, the wind intersecting line is extended without changing the diameter of the blade, so as to increase the wind intersecting area, and greatly enhance heat dissipating rate.

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